

**AMENDMENTS TO THE CLAIMS:**

**The claims are amended, as follows:**

1. (Currently amended) A light emitting diode, comprising:
  - a ceramics substrate that has a high thermal conductivity;
  - a light emitting element that is mounted on the ceramics substrate; and
  - a radiation plate that is bonded to ~~the~~ a back surface of the ceramics substrate;
  - wherein the radiation plate contacts the ceramics substrate at a contact region that includes a region of the back surface of the ceramics substrate corresponding to a region of the ceramics substrate on which the light emitting element is mounted.
2. (Original) The light emitting diode according to claim 1, wherein:
  - the light emitting element is flip-chip mounted on the ceramics substrate.
3. (Currently amended) The light emitting diode according to claim 1, wherein:
  - the radiation plate is comprised of a metal and is folded into a waveform outside the ceramics substrate.
4. (Original) The light emitting diode according to claim 1, wherein:
  - the radiation plate has a plurality of penetrating holes.
5. (Currently amended) The light emitting diode according to claim 1, wherein:
  - the radiation plate is comprised of a metal and is provided with a plurality of radiation fins that are formed by making a cut in the radiation plate and ~~folding the~~ bending an inside

portion of the cut to form a radiation fin.

6. (Currently amended) A light emitting diode array, comprising:

- a ceramics substrate that has a high thermal conductivity;
- a light emitting element that is mounted on the ceramics substrate; and
- a radiation plate that is bonded to ~~the~~ a back surface of the ceramics substrate;

wherein the radiation plate contacts the ceramics substrate at a contact region that includes a region of the back surface of the ceramics substrate corresponding to a region of the ceramics substrate on which the light emitting element is mounted; and

a circuit board on which the plurality of light emitting diodes are mounted, the circuit board including a through hole.

7. (Original) A light emitting diode, comprising:

- a circuit board that includes a plurality of penetrating holes, each ~~of which~~ having a narrowed portion;
- a ceramics substrate that is mounted on the circuit board while bridging the narrowed portion, the ceramics substrate having a high thermal conductivity;
- a light emitting element that is mounted on a circuit pattern of the ceramics substrate;

and

- a radiation plate that is bonded to ~~the~~ a back surface of the ceramics substrate and extends in one of the plurality of penetrating holes without contacting the edge of the ~~one of the plurality of penetrating holes,~~ and;

wherein the circuit pattern of the ceramics substrate is electrically connected to a circuit pattern of the circuit board at the bridged narrowed portion.

8. (Original) A light emitting diode array, comprising a plurality of the light emitting diodes defined in claim 7.

9. (Original) The light emitting diode according to claim 7, wherein:

the radiation plate has a plurality of penetrating holes.

10. (Original) The light emitting diode array according to claim 8, wherein:

the radiation plate has a plurality of penetrating holes.

11. (Currently amended) The light emitting diode according to claim 7, wherein:

the radiation plate is comprised of a metal and is provided with a plurality of radiation fins that are formed by making a cut in the radiation plate and folding ~~the~~ an inside portion of the cut.

12. (Currently amended) The light emitting diode array according to claim 8, wherein:

the radiation plate is comprised of a metal and is provided with a plurality of radiation fins that are formed by making a cut in the radiation plate and folding ~~the~~ an inside portion of the cut.

13. (Currently amended) A light emitting diode, comprising:

a substrate that has a low coefficient of thermal expansion and a high thermal resistance;

a circuit pattern that is formed using a conductive material on the substrate;

a light emitting element that is mounted on ~~the~~ a surface of the substrate;

a metal member that electrically connects the light emitting element to the circuit pattern;

a glass lens that covers ~~the~~ a periphery of the light emitting element while leaving a space and a resin injection hole, the space being defined to house the light emitting element and the metal member;

a sealing material that seals the surface of the substrate and the glass lens; and

light transmitting resin that is filled in the space by injecting the resin through the resin injection hole.

14. (Original) The light emitting diode according to claim 13, wherein:

the sealing material has a coefficient of thermal expansion between the substrate and the glass lens.

15. (Currently amended) The light emitting diode according to claim 13, wherein:

the sealing material ~~is of~~ comprises a sealing glass.

16. (Currently amended) The light emitting diode according to claim 13, wherein:

the light transmitting resin ~~is~~ comprises a transparent silicone resin.

17. (Original) The light emitting diode according to claim 13, wherein:

the substrate has a resin injection hole that penetrates through the substrate and communicates with the space, instead of the resin injection hole defined by the glass lens.

18. (New) The light emitting diode according to claim 1, further comprising:

a power supplying terminal that is bonded to the back surface of the ceramics substrate at a portion except a region that the radiation plate is bonded to the back surface of the ceramics substrate.